

tribe. The difficulty in the case of the hop-aphis has always been to know where the eggs from which the flies proceed in spring, are placed by the gravid females in autumn. This could not be on the hop-plant, which dies down yearly to the roots. But the mystery has been solved by Mr. Walker, who has found that it is on the *sloe-tree* or *black-thorn* (*Prunus spinosa*) that the female deposits her eggs in autumn, which are there hatched in spring, and the second generation being produced with wings, flies to the hop-plants and establishes itself on the leaves, which, owing to the well-known rapid increase of these insects, it soon covers and exhausts of the sap. Now if the hop-aphis does not deposit its eggs on any other shrub or plant than the sloe, as Mr. Walker believes, it is evident that, to secure the hops in any district from the hop-aphis, it is only necessary to destroy all the sloe-trees, which, as they are found chiefly in hedges, and there in no great number, would be no difficult matter. And if, from the escape of a part of the sloe-trees, and the flight of some of the hop-aphides from distant quarters, a few of the female aphides were still found on the hop-plants in spring, nothing would be easier, as I ascertained by experiments in hop-grounds in Worcestershire in 1838\*, than to clear them from every one of these assailants, at a very trifling expense, by employing women and children, by means of step-ladders, to crush every aphis found, by pressing them and the leaf between the thumb and fore-finger, so as to destroy the flies without injuring the texture of the leaf. When it is considered that the extirpation of the hop-aphis would in some years save 200,000*l.* to the revenue, and three or four times as much to the hop-growers, it is evident that this is a matter worth attention, and that the science which can effect this saving is no trifling one.—*From the Address delivered by the President W. Spence, Esq., F.R.S., at the Anniversary Meeting of the Entomological Society of London, Jan. 22, 1849.*

*Description of a new Mexican Quail.* By WILLIAM GAMBEL, M.D.

*Ortyx thoracicus.* With a full, somewhat pointed crest, the feathers of which are black, obscurely mixed with dull brown and rufous. Nape mottled with black and bright rufous, and traversed by two interrupted white lines, which commence of a cinereous colour about the front and pass over the eyes. Throat and cheeks pale cinereous, each feather with a narrow black margin. Sides of neck, breast and sides pale rufous; deepest on sides of neck, where the feathers have a few scattered black spots. Lower part of belly and vent white. Under tail-coverts rusty white, mottled with black. Tail very short and rounded, its colour dark brown, with freckled irregular bars of rusty white. Lower part of back and upper tail-coverts irregularly variegated with different shades of gray, fulvous and black; upper part of back dark rufous, the centres of the feathers grayish, and traversed by fine, irregular, dusky lineations. Wings and scapulars beautifully variegated with black, rufous and gray;

\* Introd. to Entomology, 6th edit., vol. i. p. 149.

wing-coverts and scapulars having the upper vanes deep black, margined and lined with rufous, the lower vanes grayish freckled, and blotched with black, while the shafts are dull whitish.

Tertiaries on their upper vanes with broad fulvous margins; feet and legs pale; bill black; irides chocolate-brown.

Length 8 inches, wing 5 inches, tail 2 inches, tarsus  $1\frac{3}{10}$ ths, ridge of bill  $\frac{6}{10}$ ths, from angle of mouth  $\frac{7\frac{1}{2}}{10}$ ths.

This appears to be an undescribed species of that group of quails which so much resemble our common *O. virginianus*. The present however is readily distinguished from that species by its much longer bill and very short tail, as well as its general markings, particularly beneath; the breast and sides being of a plain fawn-colour, or pale rufous. The only specimen from which I describe was brought from Jalapa, Mexico, by Mr. Pease. It does not appear to be quite adult, and the markings about the head and throat may be somewhat different in the old bird; still however its characters are sufficiently marked. Judging from description, it must very nearly resemble the *O. pectoralis* of Gould; but besides the difference of markings, he makes no mention of that species having a crest. The length of the bird, as well as of the wing, is in this also just one inch greater, which would hardly be the case in a young bird.—*Proceedings of the Academy of Natural Sciences of Philadelphia*, vol. iv. p. 77.

*Descriptions of two new Californian Quadrupeds.*

By WILLIAM GAMBEL, M.D.

*Dipodomys agilis*. Colour above yellowish brown, mixed with dusky; beneath pure white, extending half-way up the sides. Head elongated, tapering from the ears to a sharp point. Ears nearly round, sparsely hairy. Eyes large, dark brown. A large pouch on each side of the head, opening externally on the cheeks. Both hind- and fore-feet with four toes and the rudiment of a fifth. The hind-legs very long and strong. Tail very long, slender, covered with hair, and ending in a pencillated tuft.

Length  $10\frac{1}{2}$  inches, including the tail, which is  $6\frac{1}{2}$  inches.

Dental system:	Teeth	20.	$\left\{ \begin{array}{l} 10 \text{ upper.} \\ 10 \text{ lower.} \end{array} \right.$	$\left\{ \begin{array}{l} 2 \text{ incisors.} \\ 8 \text{ molars.} \end{array} \right.$
				$\left\{ \begin{array}{l} 2 \text{ incisors.} \\ 8 \text{ molars.} \end{array} \right.$

In the upper jaw the incisors are divided by a longitudinal furrow.

This beautiful Jerboa-like animal is an abundant inhabitant of the vineyards and cultivated fields of the Pueblo de los Angeles, Upper California.

Like the other pouched animals, it forms extensive burrows, traversing the fields in different directions, and is only dislodged during the process of irrigation. They leap with surprising agility, sometimes the distance of ten feet or more at a spring, and are difficult to capture.

*Mus californicus*. Dark gray, lighter about the head and shoulders, above tinged with light brown, on the sides almost fulvous,